

CLAIMS

1. Esters of C₆₋₂₂ fatty acids of pentaerythritol, dipentaerythritol and/or tripentaerythritol which contain less than 0.3% by weight C₁₇ fatty acid acyl groups and have a melting point of at least 30°C.
2. Esters as claimed in claim 1, characterized in that they are esters of pentaerythritol with a percentage content of (a) 5 to 35% by weight monoesters, (b) 20 to 50% by weight diesters and (c) 25 to 50% by weight triesters and optionally tetraesters.
4. Esters as claimed in at least one of claims 1 to 2, characterized in that a fatty acid mixture containing 40 to 50% by weight C₁₆ fatty acid and 45 to 55% by weight C₁₈ fatty acid is used for the esterification.
3. Esters as claimed in at least one of claims 2 to 3, characterized in that they contain (a) 10 to 25% by weight monoesters, (b) 25 to 40% by weight diesters and (c) 30 to 45% by weight triesters and optionally tetraesters and preferably (a) 12 to 19% by weight monoesters, (b) 25 to 35% by weight diesters, (c) 30 to 40% by weight triesters and (d) 6 to 11% by weight tetraesters.
5. Process for the production of the C₁₆/C₁₈ fatty acid pentaerythritol esters claimed in at least one of claims 2 to 4, in which 1.8 to 2.2 mol per mol pentaerythritol of a fatty acid mixture containing 40 to 50% by weight C₁₆ fatty acid and 45 to 55% by weight C₁₈ fatty acid or a raw material mixture with a corresponding fatty acid distribution is used and (a) the esterification is carried out at temperatures of 180°C to 250°C in an inert gas atmosphere in the absence of solvent, (b) the water formed is distilled off, (c) the reaction mixture obtained is stirred in vacuo until it has an acid value of <1 and an OH value of 145 to 158, (d) unreacted pentaerythritol is filtered off and (e) an aftertreatment with hydrogen peroxide is optionally carried out.
6. Cosmetic and/or pharmaceutical composition containing the esters claimed in at least one of claims 1 to 4.

7. Cosmetic and/or pharmaceutical composition as claimed in claim 6, characterized in that it is free from silicone oils.
8. Cosmetic composition as claimed in at least one of claims 6 to 7, characterized in that the ester or ester mixture claimed in at least one of claims 1 to 4 is present in a quantity of 0.1 to 20% by weight.
9. Cosmetic compositions as claimed in at least one of claims 6 to 8, characterized in that at least one other wax component is additionally present.
10. Cosmetic compositions as claimed in claim 9, characterized in that the other wax component is selected from the group of C₁₂₋₂₄ fatty alcohols and/or C₁₂₋₂₄ partial glycerides.
11. Cosmetic compositions as claimed in at least one of claims 6 to 10, characterized in that at least one nonionic surfactant is additionally present.
12. Cosmetic compositions as claimed in claim 11, characterized in that the nonionic surfactant is selected from the group of alk(en)yl oligoglycosides.
13. Cosmetic compositions as claimed in at least one of claims 6 to 12, characterized in that at least one oil component liquid at 25°C is additionally present.
14. Cosmetic compositions as claimed in at least one of claims 6 to 13, characterized in that they contain at least
 - (a) 0.1 to 10% by weight of at least one wax component according to any of claims 1 to 4,
 - (b) 1 to 25% by weight of at least one oil component liquid at 25°C,
 - (c) 0.1 to 5% by weight of a C₁₂₋₂₄ fatty alcohol or C₁₂₋₁₄ partial glyceride or a mixture thereof,
 - (d) 0.5 to 10% by weight of a C₈₋₂₄ alkyl oligoglucoside and
 - (e) water.
15. Use of the esters claimed in any of claims 1 to 4 as consistency factors.